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ABSTRACT

A pre-load weld fixture apparatus and method are disclosed, which include a stationary pivot block attached to a base, wherein the stationary pivot block is located adjacent to a nest for maintaining an object to be welded. Additionally a pivot arm is associated with a pivot arm insert, wherein the pivot arm rotates about a pivot point provided by a pin press component associated with the stationary pivot block, such that the pivot point is fixed to the stationary pivot block in relation to the object to be welded and wherein the pivot arm is positioned parallel to the nest. A spring block can be connected to the stationary pivot block, wherein the spring block provides tension to the pivot arm in order to permit a user to maintain the object upon the base with a desired tension for welding thereof. Finally, a torsion spring can be maintained by the spring block, wherein the torsion spring allows the spring block to provide tension to the pivot arm.